
CASE NOTE

THERE'S A TV APP FOR THAT: PUTTING THE "NEUTRAL" BACK IN NET NEUTRALITY FOR THE APP-BASED TELEVISION FUTURE

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INTRODUCTION

In 2013, Netflix became the first non-TV network to win an Emmy.¹ Did this event signal the beginning of the end for the traditional cable television experience and the classic television networks? In an age of consumer cord-cutting, where streaming video accounts for fifty percent of peak Internet traffic² and viewers want to choose which show they watch instead of which channel, the future of television is likely to come in the form of apps.³

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¹ *Netflix Wins Three Emmys, 'House of Cards' Shut Out of Major Categories*, HUFFINGTON POST (Sept. 23, 2013, 12:19 AM), http://www.huffingtonpost.com/2013/09/22/netflix-emmys-house-of-cards-wins_n_3973794.html, archived at <http://perma.cc/9NDW-NFCY>.

² See Colin Daileda, *Report: Netflix and YouTube Account for Half of Internet's Traffic*, MASHABLE (Nov. 12, 2013), <http://mashable.com/2013/11/12/internet-traffic-downstream/>, archived at <http://perma.cc/7XNT-X9KK> (describing a study finding that Netflix and YouTube account for 31.62% and 18.62% of peak Internet traffic, respectively, and that BitTorrent (4.05%), iTunes (3.27%), Amazon (1.61%), and Hulu (1.29%) also account for a large percentage of web traffic); see also Amol Sharma, *Netflix, YouTube Could Feel Effects of 'Open Internet' Ruling*, WALL ST. J. (Jan. 14, 2014), <http://online.wsj.com/news/articles/SB10001424052702304049704579320983864581364>, archived at <http://perma.cc/KE7K-FDAK> (referring to Netflix and YouTube, which account for 32% and 19% of peak Internet streaming, respectively).

³ "App" is short for "application software," popularized by modern smartphones.

Instead of a cable box, TVs would be plugged directly into an Internet connection. Instead of tuning into live channels, a TV's main interface would be a wide selection of apps. Consumers could select the Netflix app and choose from its range of TV shows and movies, or select the NBC app to access any content from that network.⁴

This exciting future comes at the height of the debate over "net neutrality." The phrase "net neutrality"⁵ refers to the general principle of equal treatment for all Internet content, or, as one oft-cited definition phrases it: "all like Internet content must be treated alike and move at the same speed over the network."⁶ However, a number of disparate ideas fall under the net neutrality umbrella, and these ideas have very different economic implications for consumers and providers. This Case Note argues that some of the principles of net neutrality should be enforced, while others are more likely to hinder innovation and economic growth. I begin by differentiating the separate concepts of net neutrality.

The bedrock net neutrality proposal is "anti-blocking," which prevents Internet Service Providers ("ISPs")⁷ from entirely barring consumer access to certain Internet sites.⁸ This proposal would, for example, prevent AT&T, which provides both Internet and phone service, from disabling its customers'

⁴ This Case Note envisions the app-based TV future, similar to the current "smart TVs" featuring apps, see *infra* Part II, as a combination of Roku and Comcast's Xfinity On Demand, except without any traditional linear programming. When a user turns on the app-based TV, the user would only interact with an app interface; there would be no live TV channels.

⁵ "Net neutrality" is also known as either "network neutrality" or "Internet neutrality."

⁶ Lawrence Lessig & Robert W. McChesney, *No Tolls on the Internet*, WASH. POST (June 8, 2006), <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/07/AR2006060702108.html>, archived at <http://perma.cc/MXW9-VC6S>; see, e.g., Alexander Reicher, *Redefining Net Neutrality After Comcast v. FCC*, 26 BERKELEY TECH. L.J. 733, 734 (2011) (explaining that net neutrality can be used to refer to the theoretical principle, the legal framework, or the technical mechanisms for treating content equally); Christopher S. Yoo, *Network Neutrality, Consumers, and Innovation*, 2008 U. CHI. LEGAL F. 179, 180-81 (2008) (explaining that proponents of net neutrality have diverse concerns, with some concerned about cable providers charging more to end users and others concerned about providers charging more to content creators).

⁷ "ISP" refers to companies that provide Internet access to consumers, whether cable, fiber-optic, or wireless, including Comcast, Verizon FiOS, AT&T U-verse, Time Warner Cable, Charter Communications, and Google Fiber.

⁸ See Jonathan E. Nuechterlein, *Antitrust Oversight of an Antitrust Dispute: An Institutional Perspective on the Net Neutrality Debate*, 7 J. ON TELECOMM. & HIGH TECH. L. 19, 27 (2009) (defining anti-blocking as a way to "address[] efforts by [an ISP] to impede its subscribers' access to particular Internet content or applications for reasons that a regulatory authority deems impermissible").

access to Skype because Skype's Voice over Internet Protocol ("VoIP") service competes with AT&T's landline telephone service.⁹

Beyond anti-blocking, several different terms interchangeably refer to related concepts. This Case Note will use the term "anti-degrading" to refer to the concept of preventing providers from intentionally diminishing quality when transmitting "disfavored content."¹⁰ Here, an analogous example would be AT&T diminishing the quality of the Skype conversations when users connect over AT&T's network.

Proposals against "tiering," sometimes referred to as "anti-discrimination" proposals, come in two forms. "Access-tiering" refers to the practice of content creators or service providers, like Netflix, paying ISPs to ensure that their content is delivered more quickly or with higher quality than other content.¹¹ "Consumer-tiering" refers to allowing consumers to pay different prices for different levels of Internet service—for instance, "more bandwidth or faster Internet service."¹²

The debate over net neutrality has recently grown more fervent. In *Verizon v. FCC*,¹³ the D.C. Circuit cast the future of net neutrality into question by vacating the Federal Communication Commission's (FCC) 2010 Open Internet Order on the grounds that the FCC had treated ISPs like common

⁹ See Tim Wu & Christopher S. Yoo, *Keeping the Internet Neutral?: Tim Wu and Christopher Yoo Debate*, 59 FED. COMM. L.J. 575, 578 (2007) (statement of Tim Wu) ("If a product being offered over the network—say, Internet voice [i]for \$5 a month—competes with an established revenue source (telephone service, offered at \$30 a month), the temptation to block it is strong.").

¹⁰ See Nuechterlein, *supra* note 8, at 26 (including the prevention of "degrading" of disfavored content" as an aspect of the anti-blocking principle).

¹¹ See Lessig & McChesney, *supra* note 6 (analogizing access-tiering to providers selling "access to the express lane to deep-pocketed corporations and relegat[ing] everyone else to the digital equivalent of a winding dirt road").

¹² Yoo, *supra* note 6, at 180. Some level of generic consumer tiering, based on faster speed alone, is already common and approved by the FCC. See Cecilia Kang, *FCC Likely to Back Tiered Pricing, Analysts Say*, WASH. POST (Sep. 28, 2010), <http://www.washingtonpost.com/wp-dyn/content/article/2010/09/27/AR2010092706514.html?nav=emailpage>, *archived at* <http://perma.cc/RZ9Y-RCYF> ("The Federal Communications Commission, which was once skeptical of tiered pricing, has signaled recently it would approve such price packages."); *see, e.g., The Right Internet Package for You*, AT&T, <https://www.att.com/shop/internet.html?tab=2> (last visited Apr. 4, 2015), *archived at* <http://perma.cc/P92E-2UGW> (showing the various download speeds of AT&T's different Internet service options). The FCC has also approved capped plans, where users pay for a limited amount of data per month, which are common among cell phone carriers but have yet to reach the broadband marketplace (though the original Internet connections of the 1990s AOL-era were almost exclusively capped plans). Cecilia Kang, *FCC Chairman Supports Broadband Data Caps amid Netflix Protests*, WASH. POST (May 22, 2012, 11:16 AM), http://www.washingtonpost.com/blogs/post-tech/post/fcc-chairman-supports-broadband-data-caps-amid-netflix-protests/2012/05/22/gIQAfdN9hU_blog.html, *archived at* <http://perma.cc/WA2R-2324>.

¹³ 740 F.3d 623 (D.C. Cir. 2014).

carriers. The FCC responded by adopting the 2015 Open Internet Order, which reclassified ISPs as common carriers and imposed a strict form of net neutrality.¹⁴ However, this Case Note argues that this strict version of net neutrality could result in the exact opposite of the outcome that the FCC seeks. Instead, a more nuanced version of net neutrality could better accomplish the Commission's goals and provide better results for consumers.

Part I of this Case Note discusses the FCC's attempt to promulgate net neutrality rules through the 2010 Open Internet Order, the D.C. Circuit case that vacated that order's key provisions, and the FCC's response in the 2015 Open Internet Order. Part II explains the future of app-based TV, analyzes the economic incentives of ISPs that predict an app-based TV future, and discusses how recent mergers and deals in the telecommunications industry affect that future. Part III suggests actions that regulators should and should not take to cultivate this app-based TV future while promoting the best experience for consumers.

I. THE FCC'S RULEMAKING

A. *The 2010 Open Internet Order*

In 2010, with the goal of "Preserving the Free and Open Internet," the FCC promulgated the "Open Internet Order."¹⁵ These rules gave the FCC a basis for regulatory authority over ISPs' services and network management after *Comcast Corp. v. FCC*.¹⁶ The Open Internet Order's purported goal was to "preserve the Internet as an open platform for innovation, investment, job creation, economic growth, competition, and free expression."¹⁷ The Order adopted "three basic rules . . . grounded in broadly accepted Internet norms" of (1) "transparency," (2) "no blocking," and (3) "no unreasonable discrimination."¹⁸

¹⁴ Press Release, FCC, FCC Adopts Strong, Sustainable Rules to Protect the Open Internet (Feb. 26, 2015), available at <http://www.fcc.gov/document/fcc-adopts-strong-sustainable-rules-protect-open-internet>, archived at <http://perma.cc/9LYT-Q4HG>.

¹⁵ Preserving the Open Internet Broadband Indus. Practices, 25 FCC Rcd. 17905, 17906 (2010) (report and order).

¹⁶ See 600 F.3d 642, 661 (D.C. Cir. 2010) (holding that the FCC's previous attempts to enforce net neutrality principles through ancillary jurisdiction under the Communications Act rather than by promulgating rules were flawed "[b]ecause the Commission has failed to tie its assertion of ancillary authority over Comcast's Internet service to any 'statutorily mandated responsibility'" (citation omitted).

¹⁷ Preserving the Open Internet Broadband Indus. Practices, 25 FCC Rcd. at 17906.

¹⁸ *Id.*

The transparency rule required, obviously, transparency.¹⁹ The rule demands “[e]ffective disclosure of . . . providers’ network management practices and the performance and commercial terms of their services.”²⁰ This included disclosure of certain aspects of the providers’ network practices (for example, congestion management practices),²¹ performance characteristics (for example, impact of specialized services),²² and commercial terms (for example, pricing).²³

The Order’s anti-blocking rule encompassed anti-blocking, anti-degrading, and anti-access-tiering principles.²⁴ The Order mandated that an ISP “shall not block” any lawful²⁵ “traffic transmitted to or from end users of a broadband Internet access service.”²⁶ This rule also “entitle[d] end users to both connect and use any lawful device of their choice.”²⁷ This rule would have prevented, for example, Google Fiber from blocking mobile devices that support Apple’s iOS operating system in an effort to encourage people to use Google Android devices instead. The rule also included the anti-degradation principle, as “the no-blocking rule bar[red] [ISPs] from *impairing or degrading* particular content [because] degrading traffic

¹⁹ Transparency is also referred to as “disclosure” and was the only one of the three rules to survive *Verizon v. FCC*. 740 F.3d 623, 659 (D.C. Cir. 2014) (“[A]lthough we reject Verizon’s challenge to the *Open Internet Order*’s disclosure rules, we vacate both the anti-discrimination and the anti-blocking rules.”).

²⁰ Preserving the Open Internet Broadband Indus. Practices, 25 FCC Rcd. at 17936.

²¹ *Id.* at 17938-39 (listing congestion management, application-specific behavior, device attachment rules, and security as network practices that must be disclosed).

²² *Id.* at 17939 (requiring cable providers to disclose “what specialized services, if any, are offered to end users, and whether and how any specialized services may affect the last-mile capacity available for, and the performance of, broadband Internet access service”).

²³ *Id.* (requiring cable providers to disclose “monthly prices, usage-based fees, and fees for early termination or additional network services,” as well as other related policies and practices).

²⁴ *Cf. supra* notes 7-9 and accompanying text.

²⁵ The Order makes it clear that providers may still block transmission of “unlawful material such as child pornography,” or even use of devices harmful to the network. Preserving the Open Internet Broadband Indus. Practices, 25 FCC Rcd. at 17942-43.

²⁶ *Id.* Interestingly, this rule had a caveat that allows for “reasonable network management.” In an attempt to bring clarity to the definition for “reasonable network management,” the Order states that a “practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose,” which includes “reducing or mitigating the effects of congestion on the network.” *Id.* at 17952. This would seem to have left open the possibility for blocking based on bandwidth use, as feared by Netflix, even under the Order. Of course, thanks to *Verizon v. FCC*, the point is moot.

²⁷ *Id.* at 17943.

can have the same effects as outright blocking.”²⁸ Finally, it encompassed the anti-access-tiering principle:

Some concerns have been expressed that [ISPs] may seek to charge edge providers simply for delivering traffic to . . . the [ISP’s] end-user customers. To the extent that a content, application, or service provider could avoid being blocked only by paying a fee, charging such a fee would not be permissible under these rules.²⁹

The third rule restricted “unreasonable discrimination.” This rule primarily listed practices that are *not* unreasonable discrimination, including consumer-tiering and “[d]ifferential treatment of traffic that does not discriminate among specific uses of the network.”³⁰ The Order specified that the Commission “would be concerned about:”

²⁸ *Id.* (emphasis added). The Commission goes on to say that “in some circumstances the distinction between blocking and degrading (such as by delaying) traffic is merely ‘semantic.’” *Id.* The distinction remains important, especially if the future policy is to allow for access-tiering, as those who would choose to not pay for greater quality may argue that their content is being “degraded,” even if not blocked. Of course, if the content is degraded so severely to the point that it is unusable, the Commission’s “semantic” argument is on point.

²⁹ *Id.* at 17943-44. Again, while it was unimportant for the FCC to differentiate between the blocking and access-tiering in the 2010 Open Internet Order because it was attempting to prevent both, in this Case Note it is important to distinguish the two, because this Case Note argues that access-tiering, but not blocking, may be justified. Some forms of access-tiering can have the same effect as blocking, while others cannot. Access-tiering that allows ISPs to charge some edge providers for exceptionally fast service while still providing non-paying or lower paying edge providers with acceptable speeds would not have the same effect as blocking.

Further, the Order clarified in a footnote that the FCC did not intend “to affect existing arrangements for network interconnection, including existing paid peering arrangements.” *Id.* at 17944 n.209. Paid peering is the practice of edge providers connecting directly to ISPs’ networks instead of through third-party backbone providers. Gautham Nagesh, *Netflix Chief Says Broadband Providers Should Interconnect for Free; Rules Needed to Ensure Providers Can’t Keep Charging Netflix a Fee to Connect*, WALL ST. J. ONLINE (Mar. 20, 2014), <http://online.wsj.com/news/articles/SB10001424052702304756104579451743989667978>, archived at <http://perma.cc/64HV-FKJ7>. Backbone providers were an essential part of the original structure of the Internet: they served as middlemen between the edge providers’ ISPs and the end users’ ISPs. For an in-depth explanation of backbone providers and paid peering, see Timothy B. Lee, *Comcast’s Deal with Netflix Makes Network Neutrality Obsolete*, WASH. POST (Feb. 23, 2014), <http://www.washingtonpost.com/blogs/the-switch/wp/2014/02/23/comcasts-deal-with-netflix-makes-network-neutrality-obsolete/>, archived at <http://perma.cc/Z4JN-HNCF>. This caveat remains important for the Comcast–Netflix connection deal, see *infra* subsection II.A.1, because despite the *Verizon v. FCC* decision, Comcast remains bound to the Open Internet Order as one of the conditions of its merger with NBCUniversal. Ryan Knutson, *How a Court Just Changed the Way the Internet Will Be Paid for*, WALL ST. J. ONLINE (Jan. 14, 2014, 12:56 PM), <http://blogs.wsj.com/corporate-intelligence/2014/01/14/how-a-court-just-changed-the-way-the-internet-will-be-paid-for/>, archived at <http://perma.cc/5YWY-TLLS>.

³⁰ Preserving the Open Internet Broadband Indus. Practices, 25 FCC Rcd. at 17945.

discrimination that harms an actual or potential competitor to the [ISP] (such as by degrading VoIP applications or services when the [ISP] offers telephone service), that harms end users (such as by inhibiting end users from accessing the content, applications, services, or devices of their choice), or that impairs free expression (such as by slowing traffic from a particular blog because the [ISP] disagrees with the blogger's message).³¹

Another "significant cause for concern" would be "a commercial arrangement between a[n] [ISP] and a third party to directly or indirectly favor some traffic over other traffic . . . (i.e., 'pay for priority')." ³² The Order also expressly disclaimed the idea that it was banning "only 'anticompetitive' discrimination yielding 'substantial consumer harm.'" ³³

B. *The Impact of Verizon v. FCC*

The original 2010 Open Internet Order laid out the FCC's vision for net neutrality, but was promptly struck down by the D.C. Circuit. Of the three rules, only the transparency rule survived *Verizon v. FCC*.³⁴ In fact, some of net neutrality's proponents referred to *Verizon v. FCC* as the death of net neutrality.³⁵ The D.C. Circuit undertook a legal analysis of the Order based on whether or not the FCC was treating ISPs as common carriers. Within that discussion, the court also dissected the evidence regarding the economic impact of the Order and whether it would help or hurt innovation in the ISP market.

1. The Legal Analysis of the Order and the Common Carrier Question

After recalling the history of net neutrality regulations,³⁶ the D.C. Circuit explained why the Order must be vacated. The FCC had previously

³¹ *Id.* at 17946 (citations omitted).

³² *Id.* at 17947.

³³ *Id.* at 17949. This language seems to parallel antitrust law and could be employed in future broadband regulations.

³⁴ 740 F.3d 623, 659 (D.C. Cir. 2014).

³⁵ See, e.g., Clyde Wayne Crews Jr., *Court Rules Against Net Neutrality in Verizon v. FCC*, FORBES (Jan. 14, 2014), <http://www.forbes.com/sites/waynecrews/2014/01/14/court-rules-against-net-neutrality-in-verizon-v-fcc/>, archived at <http://perma.cc/D4GJ-X63B> (including a clever cartoon of net neutrality's gravestone).

³⁶ See *Verizon v. FCC*, 740 F.3d at 628 ("For the second time in four years, we are confronted with a[n] [FCC] effort to compel [ISPs] to treat all Internet traffic the same regardless of source—or to require, as it is popularly known, 'net neutrality.'").

confronted the question of whether to classify ISPs as common carriers,³⁷ and had decided against. The D.C. Circuit thus found that the Order improperly regulated ISPs as common carriers.³⁸

In the opinion, Judge Tatel aptly summarized the impetus for the Order:

Proponents of net neutrality—or, to use the Commission’s preferred term, “Internet openness”—worry about the relationship between [ISPs] and edge providers. They fear that [ISPs] might prevent their end-user subscribers from accessing certain edge providers altogether, or might degrade the quality of their end-user subscribers’ access to certain edge providers, either as a means of favoring their own competing content or services or to enable them to collect fees from certain edge providers.³⁹

While common carriers originated as literal carriers delivering packages,⁴⁰ more recent debates have asked whether communication providers qualify as common carriers.⁴¹ Telephone providers were classified as common carriers soon after their emergence, and the debate over the status of Internet providers began almost immediately after their formation.⁴² In the early 2000s, the Internet providers’ preexisting classifications were simplified, and the Supreme Court affirmed this change in *National Cable & Telecommunications Ass’n v. Brand X Internet Services*,⁴³ and thus ISPs were not considered common carriers.⁴⁴

Before undertaking its analysis in *Verizon v. FCC*, the D.C. Circuit noted that it did not endeavor to decide the policy future of net neutrality, but only to address the case presented: whether or not the FCC had the regulatory authority to promulgate the 2010 Open Internet Order and regulate ISPs as planned.⁴⁵ The D.C. Circuit found that section 706 of the 1996

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 629.

⁴⁰ Cf. *Hadley v. Baxendale*, (1854) 156 Eng. Rep. 145 (a well-known case regarding the failure of a common carrier to deliver a crankshaft).

⁴¹ *Verizon v. FCC*, 740 F.3d at 629-32.

⁴² For a discussion of the common carrier differentiation between basic and enhanced services in the early days of the Internet, when telephone companies were acting as both entities, see *id.* at 629-31.

⁴³ 545 U.S. 967, 974 (2005).

⁴⁴ *Verizon v. FCC*, 740 F.3d at 629-32. This exemption from common carrier classification was extended to other kinds of Internet providers, such as DSL and wireless, over time. See *id.* at 631.

⁴⁵ See *id.* at 634-35 (“[W]e think it important to emphasize that although the question of net neutrality implicates serious policy questions, . . . our inquiry here is relatively limited. . . . [O]ur task as a reviewing court is not to assess the wisdom of the *Open Internet Order*

Telecommunications Act did furnish the Commission with the authority to adopt the Order and allowed the Commission to “regulat[e] how [ISPs] treat edge providers.”⁴⁶ However, the Commission could not regulate in a way that “contravenes any specific prohibition contained in the Communications Act,” which the D.C. Circuit found that the Order did: “[w]e think it obvious that the Commission would violate the Communications Act were it to regulate [ISPs] as common carriers.”⁴⁷

The court found that the “anti-discrimination obligation imposed on fixed [ISPs] has ‘relegated [those providers], *pro tanto*, to common carrier status,’”⁴⁸ and because “[the Commission] makes no distinction at all between the anti-discrimination and anti-blocking rules,” the court could not rely on arguments the Commission did not advance to separate them.⁴⁹ Verizon did not argue, and the court did not find, that the transparency rule⁵⁰ imposed per se common carrier status.

The court found that the transparency rule was severable from the rest of the Order,⁵¹ so the court vacated the anti-blocking and anti-discrimination rules of the Order but left the transparency rule intact.⁵² In other words, the court found that because the FCC had expressly exempted ISPs from common carrier status, it could not in effect regulate ISPs as if they were common carriers through the anti-blocking and anti-discrimination rules.

regulations, but rather to determine whether the Commission has demonstrated that the regulations fall within the scope of its statutory grant of authority.”).

⁴⁶ See *id.* at 637, 649 (embarking on *Chevron* analysis, and finding that the FCC’s new, post-*Comcast* interpretation of § 706 was a “reasonable interpretation of an ambiguous statute”).

⁴⁷ *Id.* at 649-50. The court continued by explaining that “[g]iven the Commission’s still-binding decision to classify ISPs not as providers of ‘telecommunications services’ but instead as providers of ‘information services,’ . . . such treatment would run afoul of section 153(51) [of the Telecommunications Act]: ‘A telecommunications carrier shall be treated as a common carrier under this [Act] only to the extent that it is engaged in providing telecommunications services.’” *Id.* at 650 (citations omitted).

⁴⁸ *Id.* at 655 (quoting *FCC v. Midwest Video Corp.* (Midwest Video II), 440 U.S. 689, 700-01 (1979)).

⁴⁹ *Id.* at 658.

⁵⁰ The *Verizon* case refers to the transparency rule as the disclosure rule, see *id.* at 659.

⁵¹ See *id.* (“At oral argument, Commission counsel explained that the rules function separately, and we are satisfied that the Commission would have adopted the disclosure rules absent the rules we now vacate, which, we agree, operate independently.” (citation omitted)).

⁵² *Id.*

2. The Analysis of the Economic Evidence for Innovation

Notably, the court rejected Verizon's argument that the Order was flawed because it would "necessarily have the opposite of [the Order's] intended effect because [it] will 'harm innovation and deter investment by increasing costs, foreclosing potential revenue streams, and restricting providers' ability to meet consumers' evolving needs.'"⁵³ The court found that while Verizon did proffer evidence that the Order *could* harm innovation, the record also contained evidence supporting the Commission's conclusion that the benefits of the Order outweighed the costs.⁵⁴ Thus, the evidence alone could not "settle [the] regulatory issue" and the agency's judgment deserved deference.⁵⁵

In support of its view, Verizon argued the Order and its "new limitations on business models [ISPs] may employ" would create "diminished incentives for broadband infrastructure investment."⁵⁶ Verizon also pointed to the fact that two of the FCC commissioners dissented from the Order because they believed it to be "counterproductive."⁵⁷

Neither Verizon's brief nor the Open Internet Order focus on economic arguments. The Order suggests that operators *may* face "incentives to reduce the current openness of the Internet," but fails to examine these possible incentives.⁵⁸ Verizon's brief argues that the Order "contradicts itself" by finding that despite these incentives, "[ISPs] today generally provide subscribers access to all lawful content and have strong economic incentives to continue to do so."⁵⁹

Despite Verizon's discussion of the FCC's failure to analyze the economic impacts fully, Verizon provided little of its own economic analysis. Verizon's Brief argued that "the rules will harm innovation and deter investment by increasing costs, foreclosing potential revenue streams, and

⁵³ *Id.* at 649.

⁵⁴ *Id.* (describing the record as containing evidence that "[b]y comparison to the benefits of [its] prophylactic measures, the costs associated with the open Internet rules . . . are likely small" (internal quotation marks and citations omitted)).

⁵⁵ *Id.* (explaining that the Commission offered a rational connection between the evidence and its policy choice, and that "Verizon ha[d] given [the court] no persuasive reason to question that judgment").

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Joint Brief for Verizon and MetroPCS at 51, *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014) (No. 11-1355) (pointing out that while the FCC's "repeated fallback is that network operators have incentives to act badly," the FCC did not provide any further support for what incentives operators face (internal quotation marks and citations omitted)).

⁵⁹ *Id.* (internal citation omitted).

restricting providers' ability to meet consumers' evolving needs," and pointed to the fact that "[e]ven the Justice Department and Federal Trade Commission cautioned that broadband regulation could 'stifl[e] the infrastructure investments needed to expand broadband access.'"⁶⁰

The absence of thorough economic analysis on both sides was not fatal to either party.⁶¹ However, Judge Silberman, in his dissent, argued that the entire Order should be vacated for lacking a factual basis for the hypothesized economic incentives.⁶² The Commission gave only four specific examples of ISPs limiting Internet openness,⁶³ accompanied by a list of possible actions that ISPs "may" have the incentive to take.⁶⁴

The Commission further provided no finding that ISPs possessed market power.⁶⁵ Without market power, ISPs are unable to sustainably take steps that limit internet openness. If a provider's consumers found that Netflix was too slow for their enjoyment, they could switch to another provider.⁶⁶ If ISPs do not have market power in any particular market, regulation is less necessary, because the market will restrict ISPs' ability and incentives to block or discriminate between edge providers. Under the transparency rule, consumers could easily identify their ISPs' departures from net neutrality and could switch if a provider impinged on their enjoyment of an edge providers' services. Fears of collective ISP blocking-actions implicate

⁶⁰ *Id.* at 51-52 (internal quotation marks and citations omitted).

⁶¹ *But see Verizon v. FCC*, 740 F.3d at 665 (Silberman, J., concurring in part and dissenting in part) ("My view, then, is that the Commission's failure to conduct a market power analysis is fatal to its attempt to regulate, because it means that there is inadequate evidence to support the lynchpin of the Commission's economic theory.").

⁶² *See id.* at 662 ("Verizon alternatively argue [sic] that . . . the regulation is arbitrary and capricious because its findings—such as they are—lack substantial evidence. I agree.").

⁶³ *Id.* at 648 (majority opinion).

⁶⁴ *Id.* at 663 (Silberman, J., concurring in part and dissenting in part) ("[T]he majority correctly observes that we should defer . . . , but deference to such a judgment must be based on some logic and evidence, not sheer speculation. That a party 'may' do something is hardly a finding").

⁶⁵ *Id.* ("[The FCC's theory] rests . . . on a false factual premise—that the evidence supports a finding that [ISPs] across the board, in all markets, enjoy sufficient economic clout to take [blocking or discriminatory] actions.").

⁶⁶ Market power depends on the particular market and the availability of alternatives within that particular market. *See id.* at 665 (noting that a finding of market power "would, of course, have to be made market to market"). Precedent exists for consumers abandoning a cable provider for service interruptions. During a 2013 Time Warner Cable blackout of CBS caused by a retransmission fee dispute, Time Warner Cable lost 306,000 customers. An industry analyst estimated that 100,000 to 150,000 of those customers left due to the blackout. Julianne Pepitone, *Time Warner Cable Lost 300,000 Subscribers Amid CBS Blackout*, CNNMONEY (Oct. 31, 2013), <http://money.cnn.com/2013/10/31/technology/time-warner-cable-cbs/>, archived at <http://perma.cc/3L7K-JzT3>.

traditional antitrust law, not new regulations. Thus, the *ex ante*, blanket regulatory provisions of the Order are less necessary where ISPs do not have market power.

C. The 2015 Open Internet Order

Still determined to establish a net neutrality policy, in 2015, the FCC voted to adopt a new set of rules to “[p]rotect an Open Internet,” the “2015 Open Internet Order.”⁶⁷ In response to the D.C. Circuit’s finding in *Verizon v. FCC*, the FCC reclassified ISPs as telecommunications services under Title II.⁶⁸ Reclassification allows the FCC to regulate ISPs as common carriers under § 706 of the Telecommunications Act.⁶⁹ After alleviating the D.C. Circuit’s concerns from *Verizon v. FCC*, the FCC announced three “[b]right [l]ine [r]ules” of no blocking, no degrading (referred to as “[n]o [t]hrottling”), and “[n]o [p]aid [p]rioritization.”⁷⁰

The anti-blocking and anti-degrading⁷¹ rules seem to replicate the rejected provisions of the 2010 Order. The “[n]o [p]aid [p]rioritization” rule prevents the creation of “fast lanes,” paid arrangements for faster service between content creators or service providers and the ISPs.⁷²

The FCC correctly separated its bar against fast lanes from its increased scrutiny of “interconnection,” or paid peering agreements, like the Comcast–Netflix and Verizon–Netflix deals of 2014.⁷³ The 2015 Order prevents ISPs from charging content creators for faster transmission, but it does not prohibit paid peering, by which content creators can pay to link directly to ISPs and achieve faster transmissions without running afoul of the prohibition against paid prioritization.⁷⁴ While the Order does give the FCC “[n]ew [a]uthority” to address concerns of unreasonable interconnection

⁶⁷ The FCC has not yet promulgated the final, detailed rule, but has issued a press release explaining the general provisions. See Press Release, *supra* note 14.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.* This version of the Open Internet Order did not need to include a transparency rule because *Verizon v. FCC* let the 2010 Open Internet Order’s transparency rule stand.

⁷¹ The 2015 Order refers to this as the “[n]o [t]hrottling” rule. *Id.*

⁷² *Id.*

⁷³ See discussion *infra* subsection II.A.1.

⁷⁴ See discussion *infra* subsection II.A.1.

agreements,⁷⁵ it also acknowledges that, for now, the FCC's role should be to monitor these agreements rather than regulating them *ex ante*.⁷⁶

The FCC also expressed its intent to refrain from enforcing certain provisions of Title II when regulating the ISPs, to comply with Congress's requirement that the FCC regulate in the public interest.⁷⁷ The FCC has stated that it will forbear from applying rate regulation and state and local tax provisions.⁷⁸ However, certain key Title II provisions that the FCC will apply include those prohibiting "unjust or unreasonable practices or discrimination" and providing for "investigation of consumer complaints."⁷⁹

II. THE APP-BASED FUTURE OF TV

The app-based future of TV may manifest in a variety of ways.⁸⁰ It is possible that no large shift will occur—after all, most consumers still think of "TV" as the traditional linear channels with live programming. However, the rising popularity of "smart TVs" shows how imminent the app-based future may be.⁸¹ No matter the exact adoption rate it seems likely that a much greater volume of consumers will eventually treat Netflix or similar streaming video apps as a primary source of TV programming.

A large shift towards app-based TV could produce a—probably distant—future where TV is consumed *entirely* over the Internet. Instead of "live" programming, consumers would use a selection of TV-apps to select the episode they wish to watch at any given time.⁸² With each app accessible

⁷⁵ See Press Release, *supra* note 14.

⁷⁶ See Protecting and Promoting the Open Internet, FCC 15-24 paras. 202-06 (2015) (report and order), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0403/FCC-15-24A1.pdf, archived at <http://perma.cc/8X87-36ZW>.

⁷⁷ See Press Release, *supra* note 14.

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ This Part will examine the relationship between the FCC, antitrust regulation of ISPs, and the future of app-based TV. However, the need to avoid blanket *ex ante* regulations exists even if the future of TV takes a different path. With streaming video already accounting for 50% of peak Internet traffic, *see supra* note 2, the relationship between ISPs and video streaming sites should and has played a major role in the net neutrality debate.

⁸¹ See, e.g., 6 Best Smart TVs in the World, TECHRADAR (Jan. 14, 2015), <http://www.techradar.com/us/news/television/6-best-tv-platforms-in-the-world-today-1120795>, archived at <http://perma.cc/JD72-8JEB> (including images of TV set interfaces that are already beginning to incorporate this app-based TV experience, including one where YouTube and BBC appear to be equals).

⁸² Even standard TV channels are trying out this model. In 2015, at least one cable network plans to release episodes on-demand *before* the episodes air live. Nellie Andreeva, *Esquire Is First Network to Debut Entire Series on Demand with "The Short Game"*, DEADLINE.COM (Dec. 16, 2014)

through the same interface over the same Internet connection, a viewer would find it equally easy to watch a show from Netflix as from NBC.

While in some ways the app-based future is already here—products like Apple TV already make Netflix accessible—as TV-apps are more broadly adopted the relevance of this app-based future will only grow. Key companies are already predicting, and relying on, increased adoption rates. In 2013, Netflix CEO Reed Hastings, spurred on by “blockbuster earnings,” announced his belief that “Internet TV will replace linear TV.”⁸³ This view is supported by a recent forecast that “by 2020 nearly half of all video viewing will be happening outside of a legacy pay-TV service or a television set such as via an application dedicated to a specific video service.”⁸⁴ Regardless of the timing or scope of the shift, eventually, streaming video may soon account for more than fifty percent of peak Internet traffic.

A. *The Impact of Mergers and Deals*

The economic incentives affecting ISPs vary, just as the incentives affecting edge providers vary. For an ISP, relevant economic factors include its size, the number of competitors in its market, and its relationships with edge providers. The first deal examined below is the Comcast–Netflix deal, where Comcast capitalized on its position as an ISP, but also demonstrated a market solution that could provide a better experience for video streaming viewers. Next, a number of telecommunication mergers are explored, including those between ISPs alone, and those between ISPs and content creators. With that background, it will be easier to understand the economic incentives that affect the net neutrality-related decisions of ISPs.

<http://deadline.com/2014/12/esquire-the-short-game-premiere-on-demand-1201326656/>, archived at <http://perma.cc/R6QW-NY7Z>.

⁸³ Cecilia Kang, *Netflix CEO Says Future of TV Is in Apps*, WASH. POST (Apr. 26, 2013), http://www.washingtonpost.com/business/technology/netflix-ceo-says-future-of-tv-is-in-apps/2013/04/26/f21f5cce-adc7-11e2-98ef-d072ed3cc27_story.html, archived at <http://perma.cc/5RCV-9DL3>.

⁸⁴ Joseph O'Halloran, *Almost Half of TV Viewing to Be App-Based by 2020*, RAPID TV NEWS (July 13, 2013) <http://www.rapidtvnews.com/index.php/2013071328782/almost-half-of-tv-viewing-to-be-app-based-by-2020.html#ixzz2sWIAqbnL>, archived at <http://perma.cc/N2GV-H2UG>; see also THE DIFFUSION GROUP, *The Future of TV: A View from 2013* (2013), <http://tdgresearch.com/report/the-future-of-tv-a-view-from-2013/>, archived at <http://perma.cc/KR9S-G3PX> (predicting “a substantial portion of TV viewing will transition from today’s linear broadcast model to . . . ‘App TV’”).

1. The Comcast–Netflix and Verizon–Netflix Deals

With Netflix traffic creating 32% of web traffic and poised to grow,⁸⁵ Netflix and Comcast predictably sought to find a solution in the open market. In early 2014, the two companies reached a deal where Netflix paid Comcast “to ensure its online videos are streamed smoothly.”⁸⁶ Although this deal may have appeared to be an example of access-tiering at first, it is actually more nuanced and technical.

Instead of paying for its service to be delivered faster than other content, as the traditional anti-access-tiering principle imagines and forbids, the deal simply allowed Netflix to cut out the middlemen and directly connect to Comcast’s network.⁸⁷ Comcast clarified that the “deal does not give preferential treatment to Netflix’s videos” and likened it to many preexisting arrangements “for the routing of Web traffic.”⁸⁸

This deal is notable for its effect on the app-based future of TV, and is also relevant for some of the newly promulgated rules in the 2015 Order. As discussed above,⁸⁹ the 2015 Order’s prohibition of paid prioritization is not implicated because these deals do not create fast lanes. They do achieve similar ends, which leads some net neutrality proponents to argue that “it’s hard to see a practical difference between this deal and the kind of tiered access that network neutrality advocates have long feared.”⁹⁰ These deals are different because they successfully bring faster speeds to consumers by cutting out a middle man, possibly saving money for all parties except the backbone provider. The 2015 Order does directly address these deals: rather, it provides the FCC with the authority to assess the reasonableness of the deals.⁹¹ With this new authority, the FCC will be able to step in when deals end up hurting consumers, but can still allow ISPs and content creators to develop innovative market solutions that will be beneficial to all involved.

⁸⁵ See *supra* note 2 and accompanying text.

⁸⁶ Cecilia Kang, *Netflix Strikes Deal to Pay Comcast to Ensure Online Videos Are Streamed Smoothly*, WASH. POST (Feb. 23, 2014), http://www.washingtonpost.com/business/technology/netflix-strikes-deal-to-pay-comcast-to-ensure-online-videos-are-streamed-smoothly/2014/02/23/oe498d18-9cc2-11e3-975d-107dfef7b668_story.html, archived at <http://perma.cc/CLP9-LULE>; see also Edward Wyatt & Noam Cohen, *Comcast and Netflix Reach Deal on Service*, N.Y. TIMES (Feb. 23, 2014), http://www.nytimes.com/2014/02/24/business/media/comcast-and-netflix-reach-a-streaming-agreement.html?_r=0, archived at <http://perma.cc/J88K-5J37> (describing the agreement).

⁸⁷ See Kang, *supra* note 83.

⁸⁸ *Id.*

⁸⁹ See *supra* Section I.C.

⁹⁰ See Lee, *supra* note 29.

⁹¹ See *supra* note 76 and accompanying text.

Verizon and Netflix reached a similar deal several months after the Comcast deal.⁹² The deal followed months of conflict between Verizon and Cogent.⁹³ Cogent is a backbone provider⁹⁴ which links ISPs like Verizon to clients like Netflix.⁹⁵ Netflix's massive share of Internet traffic had overwhelmed the links between Cogent and Verizon.⁹⁶ According to Verizon, its original agreement with Cogent was based on the idea that the same amount of traffic would flow in both directions.⁹⁷ That expectation explained the initial lack of payment for the connection by either party.⁹⁸ However, Netflix's increased traffic disrupted the balance between Cogent and Verizon's traffic. Verizon sought compensation from Cogent, but Cogent refused.⁹⁹ The existing relationship between Netflix, Cogent, and Verizon was no longer working, and Verizon wanted a market solution to provide its consumers with access to Netflix without the strain that Cogent was putting on it without paying. Essentially, these deals cut out the backbone-provider middlemen, in this case Cogent, and allowed direct connections between service providers and the end users' ISPs.

2. Telecommunications Mergers

The telecommunications and media industries have long been a breeding ground for horizontal and vertical mergers, both attempted and consummated. This trend began long ago with mergers between movie production companies and movie theaters,¹⁰⁰ continued with mergers

⁹² Sam Gustin, *Netflix Pays Verizon in Streaming Deal, Following Comcast Pact*, TIME (Apr. 28, 2014), <http://time.com/80192/netflix-verizon-paid-peering-agreement/>, archived at <http://perma.cc/8Y2W-YX8C>.

⁹³ Lee, *supra* note 29.

⁹⁴ For a definition of backbone provider, see *supra* note 29.

⁹⁵ Lee, *supra* note 29.

⁹⁶ See Jon Brodtkin, *Netflix Packets Being Dropped Every Day Because Verizon Wants More Money*, ARSTECHNICA (Feb. 21, 2014), <http://arstechnica.com/information-technology/2014/02/netflix-packets-being-dropped-every-day-because-verizon-wants-more-money/>, archived at <http://perma.cc/5UPJ-2887> ("Verizon wants to ditch the 'settlement-free' peering model and get money from Cogent, arguing that it has to accept far more traffic from Cogent than vice versa because of high-bandwidth applications like Netflix.").

⁹⁷ *Id.*

⁹⁸ See *id.* ("The connections between Cogent and Verizon take the form of peering Peering generally happens without any money changing hands, particularly if the two companies involved are of similar size and influence.").

⁹⁹ *Id.*

¹⁰⁰ See, e.g., *United States v. Paramount Pictures*, 334 U.S. 131 (1948) (breaking up vertically integrated motion picture corporations that were engaged in producing films in studios, distributing films, and exhibiting films in movie theaters).

between telephone companies,¹⁰¹ and then mergers between cable TV and Internet companies,¹⁰² and now, mergers between cable TV–Internet conglomerates and content creators¹⁰³ as well as between cable TV–Internet conglomerates.¹⁰⁴

One illustrative and famous example is the merger between AOL and Time Warner. At the time of the merger, AOL was “the world’s dominant ISP,” while Time Warner held “the distribution channels, media, and entertainment brands.”¹⁰⁵ At the time, commentators predicted it would be the end of the Internet.¹⁰⁶ However, despite expectations, by 2009, Time Warner realized that the merger’s expected benefits had never come to fruition and split off AOL.¹⁰⁷

More recently, cable TV and Internet company Comcast merged with content creator NBCUniversal, which owned TV networks such as NBC and its sister channels MSNBC and CNBC and film production through

¹⁰¹ See, e.g., *FCC OKs Cingular, AT&T Wireless Merger*, 12 ANDREWS ANTITRUST LITIG. REP., Nov. 24, 2004, at 11, 11, available at 2004 WL 2674733 (describing the approval by both the FCC and DOJ of the merger between Cingular, a mobile telephone company, and AT&T Wireless, the mobile telephone arm of the AT&T).

¹⁰² Most companies that currently supply both cable television and Internet services were created through internal development, but some companies provide similar bundled packages through joint ventures. See, e.g., *High Speed Internet & DIRECTV Deals*, VERIZON, <http://www.verizon.com/home/directv/> (last accessed Apr. 4, 2015), archived at <http://perma.cc/WWN4-FG2T> (offering consumers the option to purchase Verizon Internet access and DirecTV).

¹⁰³ See, e.g., *Feds Approve Comcast, NBC Universal Merger*, 28 WESTLAW J. COMPUTER & INTERNET, Feb. 16, 2011, at 8, 8, available at 2011 WL 529021 (describing the approval by the FCC and the DOJ of a merger between Comcast and NBCUniversal).

¹⁰⁴ See, e.g., Cecilia Kang, *Comcast, Time Warner Agree to Merge in \$45 Billion Deal*, WASH. POST (Feb. 13, 2014), http://www.washingtonpost.com/business/economy/comcast-time-warner-agree-to-merge-in-45-billion-deal/2014/02/13/7b778d60-9469-11e3-84e1-27626c5ef5fb_story.html, archived at <http://perma.cc/37EG-XCFN> (“Comcast’s \$45 billion bid for Time Warner Cable would create a cable television behemoth . . .”).

¹⁰⁵ Aaron M. Wigod, *The AOL–Time Warner Merger: An Analysis of the Broadband Internet Access Market*, 6 J. SMALL & EMERGING BUS. L. 349, 351 (2002).

¹⁰⁶ See Adam Thierer, *A Brief History of Media Merger Hysteria: from AOL–Time Warner to Comcast–NBC*, PROGRESS ON POINT, Dec. 2009, at 1, available at <http://www.pff.org/issues-pubs/pops/2009/pop16.25-comcast-NBC-merger-madness.pdf>, archived at <http://perma.cc/5FEB-SDKS> (giving examples of the “cacophony of righteous indignation and apocalyptic predictions” that met the announcement of the AOL–Time Warner merger).

¹⁰⁷ Aaron Smith, *Time Warner to Split Off AOL*, CNNMONEY (May 28, 2009), http://money.cnn.com/2009/05/28/technology/timewarner_aol/, archived at <http://perma.cc/LCJ2-G36X>.

Universal Studios.¹⁰⁸ Despite opposition from those concerned that the deal would lead to anticompetitive behavior, the FCC and the Department of Justice (DOJ) approved the merger.¹⁰⁹ To gain approval, however, Comcast agreed not to “unreasonably discriminat[e] in the transmission of an online video distributor’s lawful network traffic to a Comcast broadband customer.”¹¹⁰ Thus, antitrust regulators have already shaped the development of net neutrality by binding Comcast to the tenets of the original 2010 Open Internet Order despite *Verizon v. FCC*.¹¹¹

B. *Economic Analysis*

There are several ways in which imposing net neutrality could harm consumers in an app-based TV future. This Case Note will not, and regulators should not, attempt to answer this question definitively. Rather, regulators should allow companies to attempt to find private solutions unless and until the need for regulation becomes absolutely clear.

That broadband capacity is not infinite is key to understanding this analysis. When Netflix viewers consume thirty-two percent of available bandwidth, they affect all the other Internet users. Before Netflix’s immense popularity, Cogent, a backbone provider, negotiated with ISPs to connect Cogent’s clients, the content creators and service providers, to consumers.¹¹² The original relationship was symmetrical—traffic was expected to move in equal amounts from Cogent to the ISPs and vice versa.¹¹³ However, as congestion in the existing arrangements grew, Netflix sought an alternative solution.¹¹⁴

Comcast and Netflix reached a deal to resolve this problem in which Netflix paid Comcast to peer directly;¹¹⁵ Netflix reached a similar deal with Verizon soon after.¹¹⁶ Thus the market answered the question of who should

¹⁰⁸ See Cecilia Kang, *Comcast, NBC Aim to Ease Feds’ Concerns*, WASH. POST (Dec. 2, 2009), <http://www.washingtonpost.com/wp-dyn/content/article/2009/12/01/AR2009120104343.html>, archived at <http://perma.cc/HS7A-YS6K>.

¹⁰⁹ *Feds Approve Comcast, NBC Universal Merger*, *supra* note 103.

¹¹⁰ *Id.* (internal quotation marks and citations omitted).

¹¹¹ See Knutson, *supra* note 29.

¹¹² See Lee, *supra* note 29.

¹¹³ See *supra* notes 92–98 and accompanying text.

¹¹⁴ Shalini Ramachandran, *Netflix to Pay Comcast for Smoother Streaming; Deal Ends Standoff, Might Serve as Precedent for Relations with Other Broadband Suppliers*, WALL ST. J. (Feb. 23, 2014), http://online.wsj.com/news/article_email/SB10001424052702304834704579401071892041790-lMyQjAxMTAoMDIwMzEyNDMyWj, archived at http://perma.cc/XWR4-P4XR.

¹¹⁵ See Lee, *supra* note 29.

¹¹⁶ See Gustin, *supra* note 92.

pay for the connections. Regulators should at least allow testing of market solutions. If regulators enter the fray, both sides will engage in rent-seeking and lobby for a more profitable regulatory scheme. Instead, regulators should allow Netflix, Comcast, Cogent, Verizon, and others to negotiate solutions that provide the best viewing experiences.

In the current market and the predicted app-based future of TV, consumers want a better experience, and ISPs and Netflix can profit from providing a better experience. While the FCC and other net neutrality proponents are concerned that Comcast will seek to degrade Netflix to promote its own linear TV programming,¹¹⁷ Comcast actually has the opposite incentives. If Verizon, or another competitor, suddenly had a much better quality of Netflix viewing, Comcast could lose its broadband customers.¹¹⁸ As more consumers move toward “cord cutting,”¹¹⁹ Comcast’s best hope of keeping customers may be providing a sufficiently good broadband experience. These incentives could force Comcast to prioritize maintaining quality broadband over hurting its online TV competitors. Considering that there is already evidence that 10% of the traditional linear TV audience leave for online video streaming each year, these pressures will be strong.¹²⁰ These economic incentives can be weighed on an individual basis by the companies, rather than decided en masse by regulators.

While the underlying problem is too little bandwidth, simply expanding bandwidth is not a perfect solution. Expanding bandwidth to an extent that would perfectly match the demand of consumers, especially consumers of app TV, “presumes that network providers are able to anticipate how much additional bandwidth will be needed and precisely where it will be needed. The reality is that some degree of misestimation is inevitable.”¹²¹ Regulators

¹¹⁷ Cf. Joint Brief for Verizon and MetroPCS, *supra* note 58 and accompanying text.

¹¹⁸ This argument relies on the existence of competing ISPs. According to a report published by the FCC, even at the highest Internet speeds, sixty-five percent of geographic areas have three or more providers, and another twenty-nine percent have two providers. See WIRELINE COMPETITION BUREAU, INTERNET ACCESS SERVICES: STATUS AS OF DECEMBER 31, 2013 9 (2014), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db1016/DOC-329973A1.pdf.

¹¹⁹ For a discussion of “cord-cutting,” see Shalini Ramachandran, *Evidence Grows on TV Cord-Cutting*, WALL ST. J. ONLINE (Aug. 8, 2012), <http://online.wsj.com/news/articles/SB10000872396390443792604577574901875760374>, archived at <http://perma.cc/CP2V-7BD5> (noting a decline in pay-TV subscribers).

¹²⁰ Mike Vago, *TV Audiences Are Steadily Shrinking, and It's All the Internet's Fault*, A.V. CLUB (Mar. 12, 2015), <http://www.avclub.com/article/tv-audiences-are-steadily-shrinking-and-its-all-in-216463>, archived at <http://perma.cc/2ULS-SU5G>.

¹²¹ Yoo, *supra* note 6, at 230.

may well be incapable of forcing ISPs to carry Netflix videos at the level of quality that consumers desire without any kind of market solution.

It is also unclear that net neutrality helps Netflix consumers. The general narrative around net neutrality suggests that by prohibiting ISPs from blocking and degrading Netflix, Netflix content will be transmitted as quickly as all other content without consumers having to pay anything extra.¹²² There are two flaws in this argument. First, Netflix consumers are already paying ISPs for faster Netflix speeds through their consumer-tiered ISP subscription costs.¹²³ Second, if all ISPs' networks, unable to preserve a separate "fast-lane" for streaming, become weighted down with Netflix traffic resulting in overall slower service, Netflix subscribers would end up with the same bad service that net neutrality proponents were hoping to prevent. If these issues affected all ISPs, then consumers would have no better alternatives. If consumers cannot watch Netflix with the quality they desire, they may not demand the app-based TV future. Without a good Netflix experience now, consumers may not see TV apps as a viable alternative to traditional TV. Thus, net neutrality may slow progress toward the app-based TV future.¹²⁴

While we should be concerned about Netflix customers, we should also pay attention to the broader effects on Internet consumers. If Netflix pays Comcast for a better connection, as has happened, Comcast has more money. Comcast could use the additional funds to benefit all of its customers by upgrading its infrastructure and improving connections to all service providers, including Netflix. Alternatively, Comcast could use the proceeds to lower prices, and attract customers away from its competitors. Comcast would in fact be incentivized to do so to compete in the app-based TV

¹²² See Mike Snider, Roger Yu & Emily Brown, *What Is Net Neutrality and What Does It Mean for Me?*, USA TODAY (Feb. 27, 2015), <http://www.usatoday.com/story/tech/2015/02/24/net-neutrality-what-is-it-guide/23237737/>, archived at <http://perma.cc/59YT-EKAT>.

¹²³ See G. Keith Cambron, *Net Neutrality: Good for Google, Not Consumers*, WALL ST. J. (May 1, 2014), <http://online.wsj.com/news/articles/SB10001424052702304393704579528172386010640>, archived at <http://perma.cc/F6VX-6LUL> ("The 'net neutrality' Internet-regulation rules . . . would force consumers to subsidize communication businesses by driving up prices for cable services Not surprisingly, the most vocal supporters of net neutrality [Google, Netflix] are the biggest benefactors of the free bandwidth that comes with it.").

¹²⁴ At first, this may seem like a favorable outcome for a pay-TV provider such as Comcast, because Comcast's cable TV competes with online streaming TV. However, the fact that Comcast has nonetheless sought out agreements with Netflix to provide Netflix users with faster service suggests that Comcast may recognize the inevitability of streaming TV. Regulators must still be careful to properly monitor the market so that this reality is achieved and the regulatory scheme supports the best experience for customers.

future. Both of these are procompetitive results that might not arise under core net neutrality principles.

While much of this Case Note has focused on the increased popularity of TV apps or Netflix, the varied needs for bandwidth among consumers are also a factor. Some consumers may use their Internet like TV, but others will use their Internet exclusively for lower-bandwidth purposes such as email. Customers who only want email-level Internet speeds should be able to pay a lower rate, and those who want faster Internet speeds for TV apps should be able to pay for better service. Significant consumer-tiering based on speeds already exists.¹²⁵ However, without net neutrality impediments, ISPs and content services might create even better solutions for different Internet experiences for different consumers. By preventing content creators from being able to pay ISPs for fast lanes, consumers who demand faster streaming TV service must pay their ISP for faster speeds, rather than the content creator paying for faster speeds. This is an inefficient solution, as consumers would probably prefer to only pay for increased speed of those Internet services that are improved by faster speeds, and not pay extra for faster email.¹²⁶ This result “will cost consumers more than if only the providers whose products depend on fast delivery had paid extra and passed those costs on to customers.”¹²⁷ Under net neutrality, all consumers are forced into a one-size-fits-all Internet that best serves no one.

These distortions to the incentives to innovate demonstrate why the anti-discrimination provision of the FCC's net neutrality proposals is concerning. Watching Netflix and reading an email have very different network effects. Not only does Netflix take up much more bandwidth, but with streaming video, delays have a much greater effect on the viewing experience.¹²⁸ Under the 2015 Order, fast lanes are outright prohibited and

¹²⁵ See Kang, *supra* note 12 and accompanying text.

¹²⁶ See Jeffrey Dorfman, *Net Neutrality Puts Everyone in the Internet Slow Lane*, FORBES (Feb. 27, 2015), <http://www.forbes.com/sites/jeffreydorfman/2015/02/27/net-neutrality-puts-everyone-in-the-internet-slow-lane/>, archived at <http://perma.cc/2AK9-UCCG>.

¹²⁷ *Id.*

¹²⁸ See Wu & Yoo, *supra* note 9, at 576 (statement of Christopher S. Yoo) (“Simply put, deviations from network neutrality may represent nothing more than network owners’ attempts to satisfy the increasingly intense and heterogeneous demands imposed by end-users. The early Internet was dominated by applications such as email and Web browsing, in which delays of half a second were virtually unnoticeable. These are being replaced by newer applications, such as Internet telephony and streaming video, in which such delays can be catastrophic. One obvious solution would be to give a higher priority to traffic associated with time-sensitive applications. Unfortunately, this is precisely the type of discrimination between applications that network neutrality would condemn.”).

paid peering deals will be scrutinized, which could result in such agreements being terminated by the FCC. Overall, consumers as a group would be left footing the bill for the expensive habits of Netflix subscribers, which may slow or stop the progress toward greater use of TV apps.

While Netflix and similar companies were originally the face of net neutrality,¹²⁹ small, start-up grassroots content creators will be more relevant to its future.¹³⁰ Instead of pursuing net neutrality, the FCC should allow the market to function and see whether or not these smaller content creators are able to compete, and what kinds of market innovations are created. If there is anticompetitive behavior by ISPs or larger content creators, then the FCC may hear complaints and address this behavior.

We cannot predict innovation. When considering whether and how to implement net neutrality, regulators should keep basic market economics in mind. Most markets are “regulated” by the free market forces of competition and consumer choice alone. As long as there is free entry into the ISP market, when ISP providers achieve supernormal profits, competitors will enter, and those entrants will drive down the profits and provide alternatives to the ISP incumbents. Some will argue that the broadband market does not have free entry because of the extreme upfront fixed costs of building a network. Incumbents incurred those fixed costs long ago, so they could theoretically keep out any new entrants by pushing down their prices until the new entrant could not reap any profits.

However, there are new entrants to the ISP market. Google Fiber and AT&T have both been building their high-speed fiberoptic networks.¹³¹ This has increased competition: in cities where Google has built a high-speed fiberoptics service, other competitors have either entered the market or improved their services to compete at Google Fiber’s level.¹³² There are

¹²⁹ See Kaja Whitehouse, *Net Neutrality Adrenaline Rush Fades for Netflix*, USA TODAY (Feb. 27, 2015), <http://americasmarkets.usatoday.com/2015/02/27/net-neutrality-adrenaline-rush-fades-for-netflix/>, archived at <http://perma.cc/G3T9-AF2V>.

¹³⁰ Cf. William Pentland, *Net Neutrality Gambles on Grassroots Innovation*, FORBES (Mar. 9, 2015), <http://www.forbes.com/sites/williampentland/2015/03/09/net-neutrality-gambles-on-grassroots-innovation/?ss=business>, archived at <http://perma.cc/S5DS-TUAC> (suggesting that the FCC’s regulations rely on the hope that ISPs will still innovate and build new infrastructure).

¹³¹ Adi Robertson, *AT&T to Chase Google Fiber with Its Own Gigabit Internet in Austin*, THE VERGE (Apr. 9, 2013), <http://www.theverge.com/2013/4/9/4205662/att-plans-gigabit-internet-to-compete-with-google-fiber>, archived at <http://perma.cc/6SS3-4ZX2>.

¹³² See Brian Fung, *This is What a Competitive Broadband Market Looks Like*, WASH. POST (Feb. 11, 2014), <http://www.washingtonpost.com/blogs/the-switch/wp/2014/02/11/this-is-what-a-competitive-broadband-market-looks-like/>, archived at <http://perma.cc/F993-WKXC> (describing a highly competitive landscape in the Austin, Texas, broadband market after Google Fiber announced it would build a network there).

also smaller boutique providers that are beginning to enter the ISP market.¹³³ If the profits in the broadband market are as high as regulators expect, new entrants will find a way into the market or the threat of new entrants will keep prices down.

III. WHAT REGULATORS SHOULD DO

This Case Note proposes a shift to ex post market regulation by keeping the FCC anti-blocking rule and reshaping the rules for anti-throttling and paid prioritization. The fear in this market is that the incentives to hurt broadband consumers will outweigh the incentives to benefit them. If the FCC allows market participants to find valuable offerings for consumers, regulators can limit any of these solutions that may be anticompetitive after they are made. Regulators will have ample information to bring enforcement actions with the transparency rule that still in place.

In regulating ex post, regulators could borrow from antitrust law's rule of reason analysis,¹³⁴ which requires evidence of "substantial consumer harm" to demonstrate anticompetitive effects.¹³⁵ In fact, the FCC should adopt the guiding principle it had previously disclaimed in the last iteration of the Open Internet Order—to focus on "only 'anticompetitive' discrimination yielding 'substantial consumer harm.'"¹³⁶ This would be a much less intrusive solution that should still protect consumers in the broadband marketplace.

The FCC has already demonstrated a willingness to use such an ex post approach when dealing with ISPs. The 2015 Order's grant of authority to monitor interconnection agreements between ISPs and content creators is the ideal model for FCC regulation of future innovative solutions in the broadband market. Under this rule, consumers and competitors can raise concerns of unreasonable agreements to the FCC and the FCC can intervene, but there is no ex ante regulation of such agreements.¹³⁷ Such a rule allows the FCC to step in and break up an agreement that is harmful to

¹³³ See David Lazarus, *Dark Fiber May Help Light Up Competition in Broadband Market*, L.A. TIMES (Jan. 19, 2015), <http://www.latimes.com/business/la-fi-lazarus-20150120-column.html>, archived at <http://perma.cc/HET9-LH75>.

¹³⁴ Under rule of reason analysis, the FTC or DOJ must show that the action in question has "the potential for anticompetitive effects" by showing "[m]arket power and the anticompetitive nature of the restraint." *Realcomp II, Ltd. v. FTC*, 635 F.3d 815, 827 (6th Cir. 2011). Then, the burden shifts to the defendant corporation to show "procompetitive justifications." *Id.*

¹³⁵ *Id.* at 832.

¹³⁶ See *supra* note 33 and accompanying text.

¹³⁷ See *supra* note 76.

consumers but allows market actors to find innovative arrangements that benefit consumers.

Comcast and Netflix found a marketplace solution to the Netflix quality issues.¹³⁸ While this solution relied on interconnection rather than access-tiering, paid prioritization, including access-tiering, should be left on the table as a possible solution to benefit end users. However, all such arrangements should be subject to the transparency provisions of the FCC's Open Internet Order to enable *ex post* regulation of contractual relationships between ISPs and content creators that result in harm to consumers rather than benefitting them.¹³⁹

The FCC should also promulgate a rule to reconfigure the anti-throttling and anti-access-tiering rules from the 2015 Order. These rules seek to prevent lower quality service for content creators who cannot pay or the prioritization of ISPs' own content. However, because of differences in bandwidth usage by service providers and end users, the market overall and consumers who do not use these bandwidth-hogging services may benefit from requirements that certain services pay for their content to move faster. The FCC could draft a more nuanced rule: rather than a strict prohibition on tiering or prioritization, the FCC could prohibit dramatic tiering or prioritization. Service providers could be allowed to pay for limited faster speeds for their content. For example, Netflix could pay Comcast for fast lanes, but the fast lanes would be limited by the rules to a 10% speed increase. This alternative maintains incentives for an ISP such as Comcast to innovate to earn additional payments from content providers such as Netflix, but will also increase the average overall speed.

Thus, anti-blocking provisions should only be enforced by antitrust law. Of course, this anti-blocking concern will be amplified further by increased incentives to merge. A merger between Netflix and Comcast, for example, would allow consumers to benefit by removing any added expense created by access-tiering. But, antitrust law should address these vertical merger cases, as the FCC did by applying additional requirements to the Comcast and NBCUniversal merger.¹⁴⁰

The free market would handle the rest. Content services like Netflix could continue to make deals with ISPs to improve quality when needed,

¹³⁸ See *supra* subsection II.A.1.

¹³⁹ The analysis could be similar to that used in antitrust. If an agreement results in unreasonably higher prices that do not match the increased quality for consumers, or results in consumers not being able to access smaller content creators with adequate quality, then regulators should step in to address these consumer harms.

¹⁴⁰ See *supra* notes 110-110 and accompanying text.

which would also lessen the costs felt by non-Netflix customers. If an ISP refused to reach a reasonable agreement, the transparency rules would inform consumers of any blocking or discrimination and allow them to switch to an ISP where they could have a better viewing experience. Any remaining incentives for anticompetitive action could be limited by antitrust regulators stepping in if ISPs colluded or merged with content creators, or by new entrants to the broadband market like Google Fiber.

This web of regulations should provide the protection that consumers need while still allowing for innovation in the broadband market. When ISPs can contract with video streaming apps like Netflix, consumers will receive higher quality streaming video and ISPs will continue to innovate and raise overall speeds. At the same time, with a transparency rule in place that mandates disclosure of such agreements, consumers will know exactly what they are paying for, and competitors will compete to offer better deals to consumers, thus assuaging concerns over inflated prices.

There have been two recent procompetitive developments that demonstrate how market forces and antitrust regulations can benefit consumers without net neutrality regulation. First, Verizon announced a new, slimmed-down TV bundle for its customers.¹⁴¹ The package includes fewer channels in the base plan, allows for more customization, and starts at only \$55, which is much cheaper existing cable plans.¹⁴² Although this move may not win back consumers who have already cut the cord, it signals that major TV and cable providers are responding to market pressure for smaller and cheaper TV packages.¹⁴³ Second, Comcast announced that it was abandoning plans to merge with Time Warner Cable after the FCC and the DOJ indicated their intent to resist the deal.¹⁴⁴ This is a positive step for those who believe that consumers benefit from having a greater number of ISPs, and was achieved without direct net neutrality regulation.

¹⁴¹ Emily Steel, *Verizon to Offer Slimmer TV Channel Packages to Battle Streaming Rivals*, N.Y. TIMES (Apr. 17, 2015), http://www.nytimes.com/2015/04/18/business/media/verizon-to-offer-slimmer-tv-channel-packages-to-battle-streaming-rivals.html?_r=0, archived at <http://perma.cc/X6VP-GWC6>.

¹⁴² *Id.*

¹⁴³ Other competitors, such as Dish Network (a satellite TV and internet provider) have offered similar packages, but Verizon is the first of the biggest cable providers to announce such a package. *Id.*

¹⁴⁴ Roger Yu & Mike Snider, *How Comcast, Time Warner Cable Deal Unraveled*, USA TODAY (Apr. 25, 2015), <http://www.usatoday.com/story/money/2015/04/24/how-comcast-deal-to-buy-time-warner-cable-fell-apart/26313471/>, archived at <http://perma.cc/6ENC-2YSD>.

This approach is best suited to achieving the most beneficial version of the app-based future of TV. Existing economic incentives are already moving the market towards this future—no drastic regulations are necessary to achieve it. There are many market forces pushing ISPs to innovate solutions for better viewing experiences for their consumers. Regulators should only step in when and where negative incentives actually create harmful effects. Otherwise, they risk harming the very consumers they are trying to help.

CONCLUSION

The future of TV looks like it will be app-based—if we have the right kinds of regulations to get us there. Strict net neutrality, contrary to the beliefs of its proponents, could actually prevent the future of app-based TV.

Instead of strict net neutrality, a more “neutral” form of net neutrality would allow ISPs and TV app creators to freely make deals that ultimately benefit consumers. These deals would improve the quality of streaming video services, either through paid prioritization or through interconnection, like the recent Netflix–Comcast deal. Consumers who want to watch all of their TV over the Internet will enjoy these benefits in the form of higher quality connections, and those consumers who do not will enjoy lower prices for broadband or less bandwidth pressure from Internet–TV viewers. These mutually beneficial deals will be further promoted by a transparency rule that allows the FCC to uncover any anti-consumer abuse, and antitrust regulators who can impose anti-blocking rules on vertically merging companies that might harm consumers. With appropriate regulations, we can make the broadband marketplace safe for the app-based future of TV.

Preferred Citation: Lindsay Fritchman, *There's a TV App for That: Putting the "Neutral" back in Net Neutrality for the App-Based Television Future*, 163 U. PA. L. REV. ONLINE 299 (2015), <http://www.pennlawreview.com/online/163-U-Pa-L-Rev-Online-299.pdf>.